THE CONTENTS OF THIS
DOCUMENT ARE THE HIGHEST
QUALITY OBTAINABLE
INITIAL SAM DATE 9/19/9/

Appendix A

Qualifications of Installation Assessment Team

BIOGRAPHICAL DATA

ROBERT L. NEBEKER SENIOR ENGINEER

EDUCATION

BS ChE (Chemical Engineering), 1964 University of Utah, Salt Lake City, Utah.

Master of Nuclear Science, 1969 University of Idaho, Moscow, Idaho.

PROFESSIONAL AFFILIATION

American Institute of Chemical Engineers, including Nuclear Engineering Division

EXPERIENCE RECORD

1964-1967	Phillips Petroleum Company and Idaho Nuclear Company, Idaho
	Falls, Idaho.
	Nuclear Test Reactor Engineer

1967-1972	Idaho Nuclear Company and Allied Chemical Corporation,
	Idaho Falls, Idaho.
	Research Engineer
	Pilot Plant Development and Safety Review

1972-1978	Allied Chemical Corporation, Idaho Falls, Idaho
	Group Leader
	Safety Review, Transuranic Waste Management, Environmental
	Impact Statement Preparation, Pilot Plant Design

Allied Chemical Corporation/Exxon Nuclear Idaho Company,
Idaho Falls, Idaho
Subsection Manager
Pilot Plant Development (Waste Management), Environmental
Impact Statement Preparation

1981-1985 Exxon Nuclear Idaho Company/Westinghouse Idaho Nuclear Company, Idaho Falls, Idaho Senior Engineer Planning, Program Control

1985-Present Westinghouse Idaho Nuclear Company, Idaho Falls, Idaho Senior Engineer
Low-Level and Hazardous Waste Management

BIOGRAPHICAL DATA

D. JOAN POLAND ENVIRONMENTAL ENGINEER II

EDUCATION

BS Geology, 1984
Idaho State University, Pocatello, Idaho

PROFESSIONAL AFFILIATION

American Association of Petroleum Geologists, Inc. Idaho Association of Professional Geologists

EXPERIENCE RECORD

1983-1984 Idaho State University, Pocatello, Idaho

Department of Geology and Museum of National History

Work Study

1984-1985 EG&G Idaho, Inc., Idaho Falls, Idaho

Associate Scientist, Environmental Sciences Section Environmental impact assessments and evaluations

1985-Present Westinghouse Idaho Nuclear Company, Idaho Falls, Idaho

Environmental Engineer II

Direct cleanup operations and assure compliance with

CERCLA, RCRA, and TSCA

BIOGRAPHICAL DATA

GEORGE E. BUKER ENVIRONMENTAL ENGINEER III

EDUCATION

BS, Mechanical Engineering Technology, 1980 Montana State University, Boseman, Montana

PROFESSIONAL AFFILIATION

Associated Students of Mechanical Engineering Technology

EXPERIENCE RECORD

1980-1984 Bechtel Power Corporation, SFPD

Colstrip Units 3 and 4, Colstrip Montana Engineer, Mechanical Piping Division

1984-1985 Bechtel Energy Corporation, LSPD

South Texas Project, Bay City, Texas Engineer, Mechanical Piping Division

1985-Present Westinghouse Idaho Nuclear Company, Idaho Falls, Idaho

Environmental Engineer III

Instrumentation and Quality Assurance

Appendix B

INSTALLATION HISTORY, ORGANIZATION AND MISSION

The ICPP is owned and administered by DOE primarily for recovering uranium from spent reactor fuels. A secondary but important purpose of the ICPP is the development of improved fuel processing and waste management methods. Initially completed in 1951, the ICPP began nuclear fuel processing in 1953 and has been expanded greatly since then. Changes are continually being made to upgrade existing facilities and to add processing capability as required.

The ICPP processes highly enriched (> 20% U-235) research, test, and propulsion reactors fuels. These fuels are clad with aluminum, zircon- ium, or stainless steel and contain uranium alloys or uranium in other various physical forms. Special fuels or fuel material occasionally are processed using customized processes and equipment in a hot cell facility.

Because of the complex compositions of highly enriched reactor fuels, the fuel mixture and fuel cladding materials generally are not separable by mechanical means, and thus the processes involved are dictated by compounds used to dilute, disperse, and encase the uranium. The processes used incorporate acid dissolution of fuel materials, liquid-liquid solvent extraction to separate and purify the uranium, and evaporation and decomposition (called denitration in this system) of the uranium product solution to a solid UO₃ product. The UO₃ product is shipped to other DOE facilities as directed by DOE.

The high level radioactive liquid wastes from fuel reprocessing operations are collected in stainless steel tanks within underground concrete vaults. This liquid waste is calcined to solid granules in the New Waste Calcining Facility (NWCF), and the resultant high-level radioactive solid waste is stored in staineless steel bins within underground concrete

vaults. Other liquid and gaseous waste streams are processed as necessary to comply with the appropriate limits established for release to the environment. All effluents are monitored to detect any deviations from expected contamination levels. Ultimately, all radioactive wastes not suitable for release to the environment are converted to solid wastes and are stored or disposed in accordance with procedures approved by DOE.

Within the confines of the ICPP area are all the facilities necessary to receive, store, process, and recover U-235 from spent reactor fuels. The process begins with the receipt of shielded casks of spent irradiated reactor fuels. These casks arrive by truck or rail. The fuel is removed from shipping casks and stored underwater. If the fuel is not suitable for underwater storage (e.g., graphite fuel), it is stored either above or below ground in special dry storage facilities.

Fuel processing at ICPP begins with dissolution in acid, using one of several headend operations. For example, aluminum-alloyed fuel is dissolved in nitric acid, using a mercuric nitrate catalyst. This results in a solution containing uranyl nitrate and fission product nitrates. Zirconium-clad fuel is dissolved in hydrofluoric acid and complexed with aluminum nitrate. In one former instance, (graphite fuel) dissolution was preceded by a combustion step. The fuel solution is then contacted with an organic solvent, tributyl phosphate (TBP), in a normal paraffin hydrocarbon diluent. The uranium is extracted by the solvent, leaving most of the radioactive fission products and other fuel components in the aqueous solution. Uranium is stripped from the solvent by water and extracted two more times with another organic solvent, methyl isobutyl ketone (hexone), for further purification.

Solvents are decontaminated before recycling or disposal. Fission products from the first-cycle extraction, as well as the small losses of fissile material contained in the aqueous raffinate, are collected in cooled, high-integrity stainless steel storage tanks, with secondary containment provided by concrete vaults. Aqueous raffinate from later extraction cycles is collected in similar uncooled tanks. The liquids in

these tanks are then calcined to solid radioactive wastes, which are stored in air cooled, stainless-steel bins in underground concrete vaults.

The final product stream is a uranyl nitrate solution, practically free of fission products and other impurities. The uranyl nitrate solution is evaporated and decomposed (denitrated) to uranium trioxide (UO_3) granules and shipped to other DOE facilities for reuse.

APPENDIX C Environmental Setting

C.1 Vegetation and Habitats

The INEL is dominated by sagebrush, rabbitbrush, and various species of bunchgrass. Other locally important shrubs include winterfat, shadscale saltbush, Nuttall saltbush, and gray horsebrush. Bottlebrush squirreltail, needle-and-thread grass, Great Basin wildrye, bluebunch wheatgrass, thickspike wheatgrass, and bluegrass are the most abundant grass species. Common forbs include dandelion, milkvetch, phlox, hawksbeard, and yellow salsify. Three-hundred and ninety-four vascular plant species were reported on the INEL, and five more species have been recently added for a total of 299.

Nonnative habitats also occur on or around the INEL. These include approximately 9880 acres of the INEL that were seeded with crest ted wheatgrass in the late 1950s.

Dominant vegetation existing on and adjacent to the INEL includes sagebrush, juniper, crested wheatgrass, and Indian ricegrass. Sagebrush provides the largest habitat on the INEL and is important to many animal species.

Juniper communities occur in the northwest and southeast portions of the INEL. These communities are generally associated with increasing elevation and are found near East and Middle Buttes and in the foothills of the Lemhi Range. Although these communities are restricted in distribution, they provide important nesting habitat for raptors and are used by a number of passerine species.

Crested wheatgrass seedings are found throughout the INEL. These seedings have existed on the INEL for 25 or more years, with little evidence of reinvasion by native species. Limited dispersal from the native community and abundant seed production by crested wheatgrass perpetuate this community.

460

A grass community dominated by Indian ricegrass occurs in a relatively narrow band near the eastern border of the INEL. This community apparently represents an old burn and also contains needle-and-thread grass and bottlebrush squirreltail.

Irrigated farmland borders much of the INEL, interspersing agriculture and sagebrush habitats. Much of the farmland is planted with alfalfa, but fields of wheat, potatoes, and irrigated pasture are also planted. These areas are used extensively by a number of passerine species, as well as by four species of game birds; mourning doves, pheasants, gray partridge, and sage grouse. About 37% of the INEL boundary is bordered by irrigated farmland and 60-70% of the INEL is grazed by cattle and sheep.

Although the INEL is dominated by sagebrush/grass uplands, over 2000 acres of wetlands may temporarily exist on the INEL during periods of high water flow in the Big Lost River. The Big Lost River spreading areas and the Big Lost River sinks are major wetlands on the INEL. These wetlands provide habitat for migratory waterfowl, shorebirds, and other wildlife species.

C.2 Fauna

A diverse insect population is associated with sagebrush communities and is an integral part of the rangeland ecosystem.

One amphibian and nine reptile species have been recorded on the INEL. Published reports indicate that an additional five reptile and five amphibian species may be found on the INEL. The only amphibian observed on the INEL is the Great Basin spadefoot toad. This species remains burrowed in the soil until moisture conditions are adequate for breeding. Of the nine reptile species occurring, the short-horned lizard, sagebrush lizard, gopher snake, and western rattlesnake occur commonly throughout the INEL.

At some time during the year, 159 bird species are found on the INEL and 15 additional species have been listed as possible occurrences. Twenty-nine species of game birds have been recorded on the INEL, 23 of which are species of waterfowl (including coots and common snipe). Sage grouse are the most common resident game bird on the INEL, which provides an important wintering and breeding/nesting habitat for this species. Although many grouse migrate from wintering/breeding ranges on the INEL to offsite areas, some grouse summer near INEL facilities and the Big Lost River. The pheasant, gray partridge, chukar, blue grouse, and mourning dove are other game birds found on the INEL. All except the mourning dove are uncommon; only one observation of a blue grouse has been reported on the INEL.

Sixty-nine species of passerines have been recorded on the INEL. Of these, the most common species include the horned lark, black-billed magpie, robin, sage thrasher, Brewer's sparrow, sage sparrow, and western meadowlark. These species occur throughout the INEL. The sage sparrow, Brewer's sparrow, and sage thrasher are the most common nongame bird species breeding the INEL.

The INEL is an important nesting and wintering area for raptors. Twenty-two species of raptors have been observed on the INEL. American roughlegged hawks, American Kestrels, prairie falcons, and golden eagles are the most abundant raptors observed on the INEL during the nonbreeding season. The most abundant breeding raptors on the site are American Kestrels and long-eared owls.

Thirty-seven species of mammals are found on the INEL. Eighteen of these species are rodents. The Townsend's ground squirrel, least chipmunk, Great Basin pocket mouse, Ord's kangaroo rat, western harvest mouse, deer mouse, bushy-tailed wood rat, and montane vole are the most common small mammals on the INEL. These animals are also relatively common throughout sagebrush regions of the Intermountain West.

Four species of leporids occur on the INEL: Black-tailed jack rabbits, white-tailed jack rabbits, Nuttall cottontails, and pygmy rabbits. All but the white-tailed jack rabbit are considered abundant.

Six species of carnivores occur on the INEL. Of these, the coyote, long-tailed weasel, and the badger are considered common. The bobcat occurs throughout the INEL but is generally uncommon. The mountain lion is considered rare. The spotted skunk is generally uncommon, but can be found in basalt outcrops.

The INEL supports resident populations of mule deer and pronghorn. Mule deer are considered uncommon and are generally concentrated in the southern and central portion of the INEL. They occur in greater numbers on the buttes and mountains surrounding the INEL. Pronghorn are found throughout the INEL and are generally considered abundant. Most pronghorn in south eastern Idaho are migratory. During winter, 4500 to 6000 pronghorn, or about 30% of Idaho's total population, may be on the INEL.

C.3 Important Habitats

Important habitats are those which are necessary for maintaining a viable wildlife population or which have a limited distribution on the INEL — and could thus be eradicated by a perturbation (e.g., a fire). Because many wildlife species on the INEL are sagebrush obligates, all sagebrush habitats within the INEL are important. However, the northern end of the INEL contains an interspersion of low sagebrush and big sagebrush habitats that provides critical winter and spring range for sage grouse and pronghorn.

Juniper communities on and adjacent to the INEL are important to nesting raptors and several species of songbirds. The Big Lost River sinks provide wetlands in an area where this habitat type is generally lacking. When water is present, the sinks are used by a large number of waterfowl and shorebird species. The relatively limited areas of these habitats and their importance to wildlife suggest that they should also be considered important.

C-4. Aquatic Ecology

Aquatic habitat on the INEL consists of evaporation and percolation ponds and the Big Lost River and associated sinks and spreading areas. Aquatic

and littoral vegetation associated with distributed sites are likely to predominate around the man-made ponds. Littoral plants include thistle, speedwell, wild lettuce, wheatgrass, wild barley, and willow. Sedges, cattails, and rushes are the most common macrophytes. The surrounding vegetation of all ponds is dominated by big sagebrush.

The Big Lost River flows across approximately 31 miles of the INEL, from the southwest to north, before it terminates in the Big Lost River sinks, which contribute to the Snake River Plain Aquifer. Plains cottonwood is the primary riparian species along the river.

Appendix D

HAZARD RANKING SYSTEM(a)

Appendix D

HAZARD RANKING SYSTEM (a)

The Hazard Ranking System (HRS) was developed to distinguish between those abandoned waste sites that may pose human health or environmental problems from those that do not. Each waste site is evaluated using a series of standard questions that examine several aspects of the site, and numerical scores are assigned according to prescribed guidelines.

To use the HRS, one collects information on exposure routes, examines the characteristics of the waste, and then assesses the potential targets in the vicinity. While the system does not provide an absolute assessment of potential risk, it is one of the few tools available for comparing a diverse number of waste sites.

The HRS consists of several work sheets that are used to group the information about the site. Each work sheet covers one potential route of release of (or exposure to) hazardous material from the site. The routes are: migration of the hazardous material through 1) air, 2) surface water and 3) ground water; 4) exposure by fire or explosion; and 5) exposure by direct contact with material at the site. The work sheets aid in the evaluation of the characteristics of each exposure route (including such things as amount of rain fall and soil permeability), the characteristics of the waste(the degree of hazard presented by the waste), and the targets (people or sensitive environments) near the site. A score is given for each of the five routes of exposure, and an overall site ranking is generated by weighting each of the individual route scores.

The modified Hazard Ranking System (mHRS) was developed to work within the framework of the EPA's HRS without changing the overall scoring system. The design of the HRS permitted a modification that allowed

⁽a) See Reference 3 in section 8.0

radioactive and chemical wastes to be evaluated separately without having radioactive and chemical wastes to be evaluated separately without having to duplicate information used to evaluate other aspects of the waste site.

The modifications to the HRS for radioactive waste sites were restricted to the waste characteristics category of the ground-water, surface-water, air, fire and explosion, and direct contact routes. this approach allowed for the common use of information in the route characteristics and targets sections of the HRS, which are pertinent to the radioactive, as well as to the nonradioactive, constituents of the site.

The mHRS splits the waste characteristics categories into two subsections: 1) radioactive wastes and 2) chemical wastes. A "separate but equal" approach was taken in that the relative hazards of the radioactive and nonradioactive constituents are evaluated separately and the scores assigned over the same range of values.

The scores for the radioactive wastes and chemical wastes are calculated separately and then compared. The higher the score is the value assigned the site.

Ranking scores from evaluation of the ICPP Waste Sites follow.

Facility	/ Name:	Idaho N	ational Er	gineering Lal	boratory	
Location	n: <u>Idaho</u>	Chemic	al Process	ing Plant		
EPA Regi	A Region: X rson(s) in Charge of Facility: me of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 neral Description of Facility: H-FE-304 Injection Well.					
Person(s	Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: MAH-FE-304 Injection Well.					
Name of	Review:	D. J.	Poland/R.	L. Nebaker	Date:	1-15-86
General	Descript	ion of	Facility:			
Location: Idaho Chemical Processing Plant EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: MAH-FE-304 Injection Well. Score: S _M = 34 S _{FE} =						
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			`			
	·					
				*		
Score:	S _M = 34					
	SFE =					
	S _{DC} =					

	Grou	nd '						Shee	t			
Rating Feator					ted \	/alue ne)			Multi- plier	Soon	Max. Score	Ref. (Section
① Observed Release	0					49			Í	45	46	3.1
If Observed Release is Give If Observed Release is Give								<u>3</u>]. 2].				-
Route Cherecteristics Depth to Aquifer of Concern	0	1	2	3					2		6	3.2
Net Precipitation Permebility of the Uncetureted Zone	0	1	2	3					7		3 3	
Physical State	0	1	2	3				_	£		3	
	•	Total	Ro	ute (Cher	ester	lotter	Scor	•		15	
3 Containment	0	1	2	3					1		3	3.3
Weste Cherecteristics Chemical					<u></u>		_		 	· · ·		3.4
e. Toxidity/Persistence Hezardous Weste Quentity	0	3	2	3	12	14 (7 8	1		18	
Radioactive b.1 Maximum Observed b.2 Maximum Potential	0	P	3	7 7		18 : 18 :		•			26 26	
	To					terisi b.1,		core	4e. 4b.	/9 /	26	
Targets Ground Weter Use Distance to Necrest Well/Population Served	0 12	* 4 9	2 <u>6</u> 18 32	③ 20 35	10 40				3 1		9 40	3.5
{						rts Sc	core			39	49	
If Line II is 45, Multiply II If Line II is 0, Multiply II		* (. 1)		1	Che Radio	mical ective	38,345	57,330	
Divide Line (5) by-57,330	and Mut	tiply	by 1	100				·	\$'	- 5	w * 52	? 2

5m = 58.2/1.73 = 34

acility Name: Idaho National Engineering Laboratory	
ocation: <u>Idaho Chemical Processing Plant</u>	
A Region: X erson(s) in Charge of Facility: mme of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 eneral Description of Facility:	
erson(s) in Charge of Facility:	
ame of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86	
eneral Description of Facility:	
ank Farm = Sept. 1975 Cont. Soil incident.	
*	
core: S _M = 18	
SFE =	
SDC =	

	Grou	nd \					She	et			
Rating Factor				signe Circle	d Valu One)	•		Multi- plier	Score	Max. Score	Ref. (Section
① Observed Release	0				41	•		1	0	45	3.1
If Observed Release is Give If Observed Release is Give			•				祖 . ②.				
Provide Characteristics Depth to Aquifor of Concern	<u>@</u>		2	3				2		.6	3.2
Net Precipitation Permebility of the Unceturated Zone	0	1	2	3				1		3	
Physical State	• •	1	2	3				ţ		3	
	T	otal	Rot	nte Ch	Aracti	rietic	s S cc	N.O.	6	15	
3 Containment	0	1	2	3				1	3	3	3.3
Weste Cheresteristics Chemical						<u>_</u>					3.4
a. Toxicity/Persistence Hazardous Waste Quantity Rediscretes	0	3	2	3	12 14 4 5		7	8 1		18	٠.
Radioactive b.1 Maximum Observed b.2 Maximum Potential	0	1	3		1 15 1 15			1		26 20	
	To			e Che	rector	istics	Scor			26	
Targets Ground Water Use Distance to Nearest Well/Population	00 13	ż	2 £ 18	(3)	ıö			3		9 40	3.5
Served ·	J 24	ॐ	32	35 4	10						
			To	tal Ta	rgets	Score)		39	49	
If Line 🚺 is 48, Multiply 🗓 If Line 🕦 is 0, Multiply	* 4 * 3	_	_	· 🖪				hemical cactive	18,252	57.3 30	
Divide Line 3 by 67,330	and Mult	iply	py '	100				3′_	5	~ * 3 1	ç

5m = 31.8/1.73 = 18

Facilit	y Name: <u>Idaho National En</u>	gineering Labo	ratory		
Location: Idaho Chemical Processing Plant EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: Transformer Yard CPP-705 PCBs. Score: S _M = 13 SFE = S-0 =					
EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: Transformer Yard CPP-705 PCBs. Score: S _M = 13					
EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1- General Description of Facility: Transformer Yard CPP-705 PCBs. Score: S _M = 13					
Name of	Review: <u>D. J. Poland/R. L</u>	. Nebeker	Date:	1-15-86	
General	Description of Facility:				
Trans fo	rmer Yard CPP-705 PCBs.	<u>.</u>		· · · · · · · · · · · · · · · · · · ·	
	N.				
					
					
	,				
Score:	S _M = 13				
	S _{FE} =				
	S _{OC} =				
	Total = 13				

	Ground	Water Route	Work Shee	t			
Rating Factor		Assigned Va (Circle On		Muiti- plier	Score	Maz. Score	Ref. (Section
① Observed Release	<u> </u>		46	1	0	45	3.1
If Observed Release is Given If Observed Release is Give			=				
Route Cheracteristics Depth to Aquifer of Concern	@ 1	2 3		2		.6	3.2
Net Precipitation Permebility of the	0 1	2 3 2 3		1		3	
Unseturated Zone Physical State	0 1	2 ③		ţ		3	
	Teta	i Route Chere	eteriaties Sco	re	6	18	
3 Containment	0 1	2 3		1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence	0 3	6 5 12) 2 3 4	14 (19	1		18	3.4
Hazardous Waste Quantity Radioactive	V (1	\	• • / :	, 1		•	
b.1 Maximum Observed b.2 Maximum Potential	3 1	3 7 11	18 21 26 1 15 21 26 1) }		26 2 6	
		Weste Charest Largest of 44.		44. 46.	19	26	
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			, , , , , , , , , , , , , , , , , , , ,		-		1
	<u> </u>	Total Targe	ts Score		39	48	
d If Line 1 is 48, Multiply 1 if Line 1 is 0. Multiply 2	= ==	= _		nemicel pective	/3,338	57.33 0	
Divide Line 🔳 by-67,330	and Multipl	y by 100		3'5	, . \$	w * 2	3.3

Sm = 23.3/1.73 = 13

Facility	y Name:	<u>Idaho Na</u>	tional Eng	ineering Labo	ratory		_
Location	n: <u>Idaho</u>	Chemica	<u>l Processi</u>	ng Plant			_
EPA Reg	ion: X						_
Person(s) in Cha	rge of F	acility:				_
							_
				·			_
Name of	Review:	<u>D. J. P</u>	oland/R. L	. Nebeker	Date:	1-15-86	_
General	Descript	ion of F	acility:				
Transfo	rmer yard	CPP-731	PCBs.				
			/				
							
			*				
Score:	S _M = 13						
	SFE =						
	S _{DC} =						
		_					

	Ground '	Water Route W	ork Sheet	<u> </u>		
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① Observed Release	(45	1	0	45	3.1
If Observed Release is Given If Observed Release is Given						
Route Cherecteristics Depth to Aquifer of	(9) 1	2 3	2		.6	3.2
Concern Net Precipitation Permebility of the	0 1	2 3 2	1		3 3	
Unceturated Zone Physical State	0 1		ţ		3	
	Tota	ol Route Cherecter	ristics Score	6	15	
3 Containment	0 1	2 3	1	3	3	3.3
Weste Cherecteristics Chemical a. Toxicity/Persistence Hazardous Weste Guentity	0 3	8 \$ 12 14 2 3 4 8	7 . 1		18	3.4
Redicective b.1 Maximum Observed b.2 Maximum Potential	81	3 7 11 18 3 7 11 18	21 26 1		26 26	ı
		Weste Characteris Largest of 4e, b.1			26	
Targets Ground Weter Use Distance to Necrest Well/Population Served	0 1 12 1 24 3	2 3 6 8 10 8 18 20 9 32 35 40	3		9 40	3.5
		Total Targets		39	49	
if Une 1 is 45, Multiply 1 if Une 1 is 0, Multiply 1] = 4] × 0 × 3] ×	6 4 : 6	Chemics Redioactive	/3.338	57.330	
7 Divide Line 6 by 67,330	end Multip	ly by 100	S'	 S	··· 2	3.3

Sm = 23.3/1.73 = 13

Facility Name: Idaho National	Engineering Laboratory
Location: Idaho Chemical Proc	essing Plant
EPA Region: X	
Person(s) in Charge of Facilit	y:
Name of Review: D. J. Poland/	R. L. Nebeker Date: 1-15-86
General Description of Facilit	
	60.
	*
Score: S _M = 13	
SFE =	
S _{DC} =	·
Total = 13	

	Ground \		Work Shee				
Rating Festor		Assigned Volcie On		Multi- plier	Score	Mex. Score	Ref. (Section
① Observed Release	①		45	1	0	48	3.1
If Observed Release is Give If Observed Release is Give							
Plante Characteristics Depth to Aquifer of Concern	<u>@</u> 1	2 3		2		.6	3.2
Net Precipitation Permebility of the	@ 1	2 3		1		3 3	
Unesturated Zone Physical State	0 1	2 ③		ţ		3	
	Tota	Route Chere	grenistics Sco	re	6	15	
3 Containment	6 1	2 3		7	3	3	3.3
Weste Cheresteristics Chemical a. Toxicity/Persistence Hezerdous Weste Quantity	; <u>}</u>	6 5 12 2 3 4	14 19 7	1		18 9	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	8;	3 7 11	15 21 26 15 21 26	1		26 26	
		Weste Charac Jargest of 4a.	teristics Score b.1, b.2.)) 4a. 4b.	19	26	
Targets Ground Water Use Distance to Necrest Well/Population Served	0 1 0 4 72 19 24 30	2 3 6 8 10 18 20 32 38 40		3		9 40	3.5
		Total Targe			39	49	
if Line 1 is 48, Multiply (= =			nemical castive	/3,3 4	57,330	
7 Divide Line (1) by-87,330	and Multiple	y by 100		S' _{fi} ,	, . 8	 • 2	3. 3

Sm=23.3/1.73=13

Facilit	y Name: <u>Idaho National Eng</u>	ineering Labo	ratory	
Locatio	n: Idaho Chemical Processi	ng Plant		
EPA Reg	ion: X			
Person(s) in Charge of Facility:			
Name of	Review: D. J. Poland/R. L	. Nebeker	Date:	1-15-86
	Description of Facility:			
<u>Paint a</u>	nd Paint Solvent Storage Arc	ea by CPP-697		
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<u></u>				
	Ŋ			
Score:	S _M = 13			
	SFE =			
	S _{DC} =			

	Ground \	Nater Route		rt			
Reting Feator		Assigned Va (Circle On		Multi- plier	Score	Mex. Score	Ref. (Section
① Observed Release	<u> </u>		48	1	0	45	3.1
If Observed Release is Give If Observed Release is Give							
2 Route Cherecteristics Depth to Aquifer of Concern	<u>@</u> 1	2 3		2		.6	3.2
Net Precipitation Permebility of the Unanturated Zone	6) 1	2 3		1		3 3	
Physical State	0 1	2 3		ţ		3	
	Total	Route Chere	steristics Sco	re	6	15	
Containment	0 1	2 (3)		1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezardous Weste	3 0	6 5 12 2 3 4	14 🕡	1		18	3.4
Quentity Redicective b.1 Maximum Observed b.2 Maximum Potential	& :	3 7 11	18 21 26 1 18 21 26 1	 		26 26	
		Veste Charect argest of 4e.	eristics Score	40. 4b.	/ 9	26	
Tergets Ground Water Use Distance to Necrest Well/Population Served	0 1 0 4 12 19 24 30	2 3 6 8 10 18 20 32 38 40		3 1	 	9 40	3.5
		Total Terge			39	49	
if Line 1 is 48, Multiply 1 is 9, Multiply 2] * 4] x [] * 3] x [C) Radio	nemical pective	/3.338	57,330	
7 Divide Line 🐻 by 87,330	and Multiply	by 100		S [*] _	5	w · 2	3 3

5m = 23.3/1.73 = 13

Facilit	y Name: <u>Idaho National Engi</u>	neering Labo	ratory		
Locatio	n: Idaho Chemical Processin	g Plant			
EPA Reg	ion: X				
Person(s) in Charge of Facility: _	<u></u>			
	-		· · · · · · · · · · · · · · · · · · ·		, · · · · ·
Name of	Review: <u>D. J. Poland/R. L.</u>	Nebeker	Date:	1-15-86	
General	Description of Facility:				
T-15 Hg	contamination soil.				
	4				***
Score:	S _M = 13				
	SFE =				
	SDC =				
	Total = 13				

	Ground	d Water Ro	ute Work She	et ,			
Rating Festor		Assigned (Circle		Muiti- plier	Score	Mex. Score	Ref. (Section
1 Observed Release	<u> </u>		48	1	0	45	3.1
If Observed Release is Given If Observed Release is Given							
Route Cherecteristics Depth to Aquifer of Concern	0	1 2 3		2		6	3.2
Net Precipitation Permebility of the	(g)	1 2 3		1		3	
Unacturated Zone Physical State	0	1 2 3				3	
	To	rtal Route Ci	erectoristics Sc	ore	6	15	
3 Containment	0	1 2 3		1	3	3	3.3
Weste Cherecteristics Chemical e. Toxicity/Persistence	۵	3 4 5	12 14 1	-		18	3.4
Hezardous Weste Quantity	ŏ (D i i	12 14 (19)	8 i		•	•
Redicective b.1 Meximum Observed b.2 Meximum Potential	<u>@</u>	1 3 7 1	11 18 21 26 L1 18 21 26	1		26 26	_
	Tot		recteristics Seo 4e, b.1, b.2.)	ro 4a 4b	19	26	
Targets Ground Water Use Distance to Nearest Well/Population	000	1: 2 3 4 8 8 16 18 20	, 10	3		9 40	3.5
Served	J 24(39 32 38	40				
		Total To	argets Score		39	49	
If Line 1 is 46, Multiply 1 is 0, Multiply 2	= =	* 5 * 4 * 5		Chemica Jioactive		57,330	
7 Divide Line 1 by 67.330	and Multi	iply by 100		3'6	., . S	· 2	3.3

5m = 23.3/1.73 = 13

Facility N	lame: <u>Idaho National Eng</u>	ineering Labo	ratory	
Location:	Idaho Chemical Processi	ng Plant		
EPA Region	1: <u>X</u>		· · · .	
Person(s)	in Charge of Facility:			
Name of Re	view: <u>D. J. Poland/R. L</u>	. Nebeker	Date:	1-15-86
General De	scription of Facility:			
Courtyard	CPP-637 Zirc. Fluoride re	elease.		
	· · · · · · · · · · · · · · · · · · ·			
·	\"			
-				
				-
	4			
Score: S _M	= 13			
SF	E =			
SD	c =			
To	tal = 13			

	Ground Wa	ter Route Wo	ork Sheet			
Rating Factor	4	(Circle One)	Muiti- piler	Score	Max. Score	Ref. (Section)
1 Observed Release	©	48	1	0	45	3.1
If Observed Release is Given If Observed Release is Given						
Route Characteristics Depth to Aquifer of Concern	<u> </u>	3	2		.6	3.2
Net Precipitation Permebility of the Unequested Zone	0 1		1		3 3	
Physical State	0 1 3	<u> </u>	\$		3	
	Total A	oute Cherecteri	etics Score	6	15	
3 Containment	0 1 3	3	1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hazardous Waste Quantity		9 12 14 (2 3 4 5	19 1 7 8 1		18	3.4
Redioective b.1 Meximum Observed b.2 Meximum Potential	Ø 1	7 11 15	21 26 1 21 26 1		26 26	•
_		ste Cherecteris gest of 4a, b.1,		19	28	
Tergets Ground Water Use Distance to Neerest Well/Population Served	0 1 0 4 12 10 1 24 30	2 (3) 6 8 10 18 20 12 35 40	3		9 40	3.5
		Total Targets S		39	49	
6 If Line 1 is 48, Multiply 3 If Line 1 is 0, Multiply 2			Chemics Redioective		57,330	
7 Divide Line 1 by 67,330	and Multiply b	y 100	5,	" . 5	· ā	3.3

5m=23.3/1.73=13

Facility	Name: <u>Idaho National Eng</u>	ineering Labor	atory		
Location	: <u>Idaho Chemical Processi</u>	ng Plant			
EPA Regi	ion: <u>X</u>				
Person(s	s) in Charge of Facility:				
Name of	Review: D. J. Poland/R. L	. Nebeker	Date:	1-15-86	
General	Description of Facility:				
Oct. 19	74 South of Tank 181 Tank F	arm.			
			· · · · · · · · · · · · · · · · · · ·		
	٨				
Score:	S _M = 13	·			
30016.	•				
	SFE =				
	SOC =				

	Grour	id V	Vate	r R	oute V	Verk S	heet	;			
Rating Fector					d Valu e One)	•		Multi- plier	Score	Max. Score	Ref. (Section
① Observed Release	<u></u>			·	4(3		1	0	45	3.1
If Observed Release is Given If Observed Release is Given							_				
Pouts Cherecteristics Depth to Aquifer of Concern	@	1	2	3		·		2		.6	3.2
Net Precipitation Permebility of the	@	1	2	3				1		3 3	
Unceturated Zone Physical State	0	1	2	3				Ţ.		3	
	7	otal	Rou	rte C	herect	prietics	Scon	•	6	15	
3 Containment	0	1	Ž	3	_			î	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezerdous Waste Quantity	0	ð	8 2	\$	12 14 4 5	•	7 8	1 7		18	3.4
Radiosctive b.1 Maximum Observed b.2 Maximum Potential	0	1	3	7		21 2 21 2				26 26	
ſ	Te					istics S 1, b.2.}		4e. 4b.	19	26	
Targets Ground Water Use Distance to Necrest Well/Population Served	0 12 24	14 14 30	2 6 18 32	② 20 35	10 40			3		9 40	3.5
			Te	otel 1	ergets	Score			39	49	
(d) If Line (1) is 48, Multiply (1) If Line (1) is 0, Multiply (2)			_	· (5)				emical active	/3,338	57.330	
Divide Line (by 67,330	end Mul	tiply	by '	100				\$′ _{gr}	5	 • 2	3.3

Sm = 23.3/1.73 = 13

Facilit	y Name: <u>Idaho National En</u>	gineering Labo	ratory		
Location	n: Idaho Chemical Process	ing Plant			
EPA Reg	ion: X				
Person(s) in Charge of Facility:		·	-	
Name of	Review: D. J. Poland/R.	L. Nebeker	Date:	1-15-86	
General	Description of Facility:				
April 1	Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: April 1974 Cont. Soil near CPP-604 E of CPP-604 by Stack. Score: S _M = 13 S _{FE} =				
Score: S _M = 13 S _{FE} =					
		*		····	
Score:	S _M = 13				
	SFE =				•
	S _{DC} =				
	- L-1 - 10				

	Ground	d Wate	r Route	Work Shee	t			<u>;</u>
Rating Factor			signed Ve Circle Ond		Multi- plier	Score	Max. Score	Ref. (Section
① Observed Release	@			45	Î	0	45	3.1
If Observed Release is Give If Observed Release is Give								
Route Cherecteristics Depth to Aquifer of Concern	0		3		2		.6	3.2
Net Precipitation Permebility of the	6	1 2	3		1		3 3	
Unestureted Zone Physical State	0	1 2	③		¥		3	
	To	tal Rou	rte Chere	nemetics Sco	r o	6	16	
3 Containment	0	1 2	<u> </u>		1	3	3	3.3
Weste Cherecteristics Chemical	• · · · · · · · · · · · · · · · · · · ·							3.4
 a. Toxicity/Persistence Hazardous Waste Quantity 	0 (3 1) 2	9 12 1 3 4	4 (1)	1		18	
Radioactive b.1 Maximum Observed b.2 Maximum Potential	0	1 3		8 21 26 °	;		26 26	
	Tou			eristics Score		/9 /5	26	
Targets Ground Water Use Distance to Nearest Weil/Population Served	0 12 24	7. 2 4 6 16 18 50 32	3 10 20 38 40		3		9 40	3.5
		To	tal Target			39	49	
if Line 1 is 45, Multiply 1 in 0, Multiply 2] = 4] ;] = [] ;	· 国 · 4		C1 Redi	nemical pactive	<u> </u>	57,330	
7 Divide Line 6 by-57,330	and Multi	ply by 1	100		3',	, . 5	w * 2.	3.3

5m = 23.3/1.73 = 13

Facility	y Name: <u>Idaho National Engir</u>	neering Labora	tory	
Location	n: Idaho Chemical Processing	Plant		
EPA Reg	ion: <u>X</u>			
	s) in Charge of Facility:			
	_			
	-			
Name of	Review: D. J. Poland/R. L.	Nebeker	Date: <u>1-15-86</u>	
General	Description of Facility:			
Valve Bo	ox 8-4 NW 50 ft.			
Score:	S _M = 13			
	S _{FE} =			
	S _{DC} =			
	T.L.1 = 14			

	Ground	Water Route Work She	eet			
Rating Factor		Assigned Value (Circle One)	Muiti- plier	Score	Max. Score	Ref. (Section)
① Observed Release	0	46	ĵ	0	45	3.1
If Observed Release is Give If Observed Release is Give					_	
Plante Characteristics Depth to Aquifer of Concern	<u>@</u> 1		2		.6	3.2
Net Precipitation Permebility of the Unesturated Zone		2 3	1		3	
Physical State	0 1	2 3	ı ş	_	3	
	Total	al Route Cherecteristics S	tore	6	15	
3 Containment	0 1	2 3	Í	3	3	3.3
Weste Cherecteristics Chemical e. Toxicity/Persistence	0 3) 2 3 4 5 7	1		18	3.4
Hezardous Weste Quantity Radioactive	<u>ه</u> ٥	7234867	3 1		8	•
b.1 Maximum Observed b.2 Maximum Potential	0 1 0 1	3 7 11 18 21 26 3 7 13 18 21 26	1		26 26	•
		Weste Cherecteristics Sco (Largest of 4e, b.1, b.2.)	yre 4e. 4b <u>.</u>	<i>19</i>	26	
Targets Ground Water Use Distance to Necrest Well/Population	0 1	2 3 1 6 8 10 1 18 20	3		9 40	3.5
Served	J 24 (3	9 32 35 40				
		Total Targets Score		39	49	
If Line 1 is 48, Multiply 1 if Line 1 is 0, Multiply	_	6 x 6 A	Chemical dioective	13,338	57,330	
7 Divide Line 6 by 67.330	and Multip	ly by 100	Si	, . S	w • 2	<u>3</u> .3

Sm=23.3/1.73=13

Facility Name: Idaho National Engineering Laboratory	
ocation: Idaho Chemical Processing Plant	
PA Region: X	
Person(s) in Charge of Facility:	
ame of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86	
eneral Description of Facility:	
alve Box B-4 SW.	
	-
4	
core: S _M = 13	
SFE =	
S _{DC} =	

Rating Factor		Assigned Value (Circle One)	Muiti- plier	Score	Mez. Score	Ref. (Section
1 Observed Release	(6)	48	1	0	45	3.1
If Observed Release is Given If Observed Release is Given			4. 2			
Route Characteristics Depth to Aquifer of	<u>(6)</u> 1	2 3	2		.6	3.2
Concern Net Precipitation Permebility of the	@ 1	2 3	T		3	
Unsaturated Zone Physical State	0 1	2 3	*		3	
	Tota	al Route Cherecteristic	s Score	6	15	
3 Containment	0 1	2 3	1	3	3	3.3
Weste Cherecteristics Chemical a. Toxicity/Persistence Hezerdous Waste Quantity	6 3	9 2 12 14 18 2 3 4 8 6	7 8 1		1 8 8	3.4
Radioactive 5.1 Meximum Observed 5.2 Meximum Potential	0 1	3 7 11 18 21 3 7 (1) 18 21			26 26	_
		Weste Characteristics (Largest of 4e, b.1, b.2)			25	
Targets Ground Water Use Distance to Necrest Well/Population Served) 0 1 124 3	2 3 1 6 8 10 9 18 20 9 32 35 40	3		9 40	3.5
		Total Targets Scor		39	48	
if Line II is 48, Multiply (1] = 4] x 2] = [] =		Chemics Rediosctiv	4 (3.33)	57.33 0	

Sm = 23.3/173 = 13

facility Name: <u>Idaho National Engineering Laboratory</u>	
ocation: Idaho Chemical Processing Plant	
Person(s) in Charge of Facility:	
Name of Review: <u>D. J. Poland/R. L. Nebeker</u> Date: <u>1-15-86</u> General Description of Facility:	
Contaminated Soil Northeast of CPP-604 by WM-102.	
Score: S _M = 13	
S _{FE} =	
SDC =	
Total = 13	

Rating Factor				signed V Circle O		Muiti- piler	Score	Mex. Score	Ref. (Section
1 Observed Release	0)			45	1	0	45	3.1
If Observed Release is Give					=				
Route Characteristics Depth to Aquifer of Concern	0		2	3		2		.6	3.2
Net Precipitation Permebility of the	0	1	2 2	3		1		3 3	
Unestureted Zone Physical State		1				ŧ		3	
	1	lotel	Rou	te Cher	ecteristics S	50 10	6	15	
3 Containment	0	1	2 (9		1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezardous Waste Quantity	0	ð	2	\$ 12 \$ 4	14 19 7	3 1		18 8	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	0	1	3 3 (18 21 26 18 21 28	1		26 26	
	To				eteristics Sec , b.1, b.2.)	ore 4e. 4b.	19	26	
Tergets Ground Water Use Distance to Necrest Well/Population Served	0 12 24	10	2 6 18 32	③ · 8 10 20 35 40		3		9 40	3.5
			Тө	tal Targ	ets Score		39	49	
(d) If Line (1) is 48. Multiply (1) If Line (1) is 0, Multiply (2)				.		Chemical dioective	13,338	57,330	

Sm= 23.3/1.73 = 13

Facilit	y Name: <u>Idaho National Eng</u>	ineering Labor	ratory		
Locatio	n: <u>Idaho Chemical Processi</u>	ng Plant			
EPA Reg	ion: X				
Person(s) in Charge of Facility:				<u></u>
Name of	Review: D. J. Poland/R. L	. Nebeker	Date:	1-15-86	
General	Description of Facility:				
Contami	nated soil buried in NE sec	urity zone.			
	·				
	-				·
Score:	S _M = 13				
	SFE =				
	S _{DC} =				
	T-4-1				

	Ground	Water Route					
Reting Festor		Assigned Va (Circle On		Multi- piler	Score	Max. Score	Ref. (Section
1 Observed Release	0		46	1	0	45	3.1
If Observed Release is Given If Observed Release is Given							
Route Cherecteristics Depth to Aquifer of	(0) 1	2 3		2		6	3.2
Concern Net Precipitation Permebility of the	@ 1	2 (3)		1		3	
Unseturated Zone Physical State	0 1	2 3	_			3	
	Tot	al Route Cherr	eterieties Sco	re	6	15	
3 Containment	0 1	2 3		1	3	3	3.3
Weste Characteristics Chemical							3.4
a. Toxicity/Persistence Hezardous Waste Quantity	0 0	0 9 12	14 (8) 8 6 7 :	1		18 8	
Radioactive b.1 Meximum Observed b.2 Meximum Potential	0 1		15 21 26 15 21 26	1 1		26 26	
		Weste Charac (Largest of 4s.	teristics Score	44. 4b.	17	26	
Targets Ground Water Use Distance to Necrest Well/Population Served	0 0 1 1 24 /	2 3 6 8 10 6 18 20 6 32 38 40		3		9 40	3.5
		Total Targ			20	49	7
(d) If Line (1) is 45, Multiply (1) If Line (1) is 0, Multiply (2)] = {{}} = {{}}	3	C	hemica osctive		<u> </u>	
7 Divide Line 1 5y-57.330				\$1		e ·	23.3

Sn= 23.3/1.73 = 13

Facilit	y Name: <u>Idaho National E</u>	ingineering Labo	ratory	
Locatio	n: <u>Idaho Chemical Proces</u>	sing Plant		
EPA Reg	in: Idaho Chemical Processing Plant ion: X S) in Charge of Facility: Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 Description of Facility: SM = 12 SFE =			
Person(s) in Charge of Facility:			

Name of	Review: D. J. Poland/R.			
General	Description of Facility:		- 	
Asbesto	ş			
	`\			
		3		
Score:	S _M = 12			
	SFE =			
	S _{OC} =			

	Air	Route V	Vork Shee	pt	,			
Rating Factor		Assigned (Circle			Multi- plier	Score	Mez. Soore	Ref. (Section)
1 Observed Release	0		48)		1	45	48	5.1
Date and Location: Sum	mer /	985 -	CPP. 6	01,60	2,60	13,60	4 605	606, an
Sampling Protocol: Si;	1 Sample	- M	icrosco	01Ċ 1	Anal	4515	•	
If Line 1 is 0, the S ₀ = 0. If Line 1 is 45. Then Proce		(5) . (2) .						
2 Waste Characteristics								5.2
a, Chemical Reactivity and	① 1	2 3			1		3	
I ncompatibility Toxi city Hezerdoue Weste	0 1 0 1	② 3 2 3	4 5 6	7 8	3 1		9	
Quantity b. Radiosctive	6 2	5 8 1	12 18 20		1		20	
	Total V	lests Che	regteristics	Score	2s. 2b.	3	20	
3 Tergets						. 0	<u></u>	5.3
Population Within 4-Mile Radius	21 3	12 15	18		1		30	
Distance to Sensitive	6	2 3			2		6	
Environment Lend Uso	(1)		•		1		3	
		Total T	ergets Sco			24	39	7
Multiply [] × 22 × 3					emical estive	7.560	35,100	
1 Divide Line	and Multiph	by 100			\$	5 •	3 5 - ,	21.5

5m=21.5/1.73=12

Facility	y Name: <u>Idaho National Eng</u>	ineering Labor	atory	
Location	n: <u>Idaho Chemical Processi</u>	ng Plant		
EPA Reg	ion: X			
Person(s) in Charge of Facility:			
	-			
	-			
Name of	Review: D. J. Poland/R. L.	. Nebeker	Date: <u>1-15-86</u>	
General	Description of Facility:			
Location: Idaho Chemical Processing Plant EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: CPP-633 French Drain (Excess Chemical Waste). Score: S _M = 11 S _{FE} = S _{DC} =				
	\ \ \			
······································				
	3			
Score:	S _M = 11			
	SFE =			
	S _{DC} =			

	Groui	nd Y	Vate	r Rou	e Work	Shee	t			
Rating Factor				igned \ irale O			Multi- plier	Score	Mex. Score	Ref. (Section
1 Observed Release	(a)				45		1	0	45	3.1
If Observed Release is Give If Observed Release is Give						4. 2.				
Plante Characteristics Depth to Aquifer of Concern	_	1.		3			2		6	3.2
Net Precipitation Permebility of the Unacturated Zone	0	1	2 (3			1		3 3	
Physical State	0	1	2 (3)			*		3	
	F	otal	Rout	e Cher	ectoristi	es Scon	•	6	15	
3 Containment	0	1	2 (3)			1	3	3	3.3
Weste Characteristics Chemical		***							-	3.4
a. Toxicity/Persistence Hazerdous Waste Quantity	0	3	2	9) 12 3 4	14 ta 5 (6)	7 8	1		18 8	
Redicective b.1 Maximum Observed b.2 Maximum Potential	8	1	3		15 21 15 21	26 1			26 26	
	Tot				teristics b.1, b.2		44. 46.	15	26	
Targets Ground Water Use Distance to Nearest Well/Population Served	0 0 12 24	14 19	2 (6 18 32	3 10 8 10 20 35 40			3		9 40	3.5
			Tet	al Targ	rts Scor	•		39	49	
if Line 1 is 46. Multiply 1 if Line 1 is 0. Multiply 2			=	3	'1	Che Radio		19,530	57.330	
Divide Line (5) by-57.330	and Mult	ipiy	by 10	00		· <u>·</u>	\$'	. 5	w = 18	4

Sm=18.4/73=11

Facility Name: Idaho National Engineering Laboratory
Location: Idaho Chemical Processing Plant
EPA Region: X
Person(s) in Charge of Facility:
Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86
General Description of Facility:
Line from CPP-633 to WL-102 2 releases to same unit.
Score: S _M = 11
S _{FE} =
S _{DC} =

	Groun	d Wat	er Rou	ite Work Sh	eet			
Rating Factor			signed (Circle (Muiti- plier	Score	Max. Score	Ref. (Section)
① Observed Release	(9			45	1	0	45	3.1
If Observed Release is Given If Observed Release is Given								
Route Cherecteristics Depth to Aquifer of	<u>6</u>		2		2		.6	3.2
Concern Net Precipitation Permebility of the	0	1 2 1 2	3		1		3 3	
Unseturated Zone Fhysical State		1 2	_		ţ		3	
	T	otal Ro	erte Che	rectoristics \$	C010	6	18	
3 Containment	0	1 2	3		1	3	3	3.3
Weste Characteristics Chemical			<i>6</i> .				44	3.4
e. Toxicity/Persistence Hezardous Waste Quantity	0	3 2	3 4	2 14 18 5 6 7	8 1		18	,
Radioective b.1 Maximum Observed b.2 Maximum Potential	0	1 3	7 1	1 18 21 26 1 (8) 21 26	1		26 26	
	Tot			ectoristics Sc 4, b.1, b.2.)	ore 4a. 4b.		26	
Targets Ground Water Use Distance to Necrest Well/Population	000	1 2 4 6 14 1	3	0	3		9 40	3.5
Served	J 24	3 0) 3:	2 36 4	0				
		1	Total Te	rgets Score		39	49	
if Line [] is 48, Multiply []			× (5)	R	Chemica edioective		57.33 0	
7 Divide Line (1) by 57,330	and Mul	liply by	100		S'		• /:	8.4

5m = 18.4 1.73 · 11

Facilit	y Name: <u>Idaho National Engi</u>	neering Labo	ratory	····	
Locatio	n: <u>Idaho Chemical Processin</u>	g Plant			
EPA Reg	ion: X			·	····
Person(s) in Charge of Facility: _				
	-				
Name of	Review: D. J. Poland/R. L.	Nebeker	Oate:	1-15-86	
General	Description of Facility:				
Kerosen	e spill by WDS-100 9-24-83.				
Facility Name: Idaho National Engineering Laboratory Location: Idaho Chemical Processing Plant EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: Kerosene spill by WDS-100 9-24-83. Score: S _M = 9 SFE = SDC =					
	8				
Score:	S _M = 9				
	SFE =				
	S _{DC} =				

	Ground Water Route Work She	et			
Rating Factor	Assigned Value (Circle One)	Multi- piler	Score	Mex. Score	Ref. (Section)
① Observed Release	① 46	1	0	45	3.1
	n a Score of 45, Proceed to Line 4. n a Score of 0, Proceed to Line 2.				
2 Route Characteristics Depth to Aquifer of Concern	<u>@</u> 1 2 3	2		.6	3.2
Net Precipitation Permebility of the Unseturated Zone	© 1 2 3 0 1 2 3	1		3 3	; ;
Physical State	0 1 2 8	ŧ		3	
	Total Route Characteristics Sco	***	6	16	
3 Containment	0 1 2 (3)	1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hazardous Waste	0 2 0 0 12 14 18 7	1 8 1		18 8	3.4
Quantity Radioactive b.1 Maximum Observed b.2 Maximum Potential	0 1 3 7 11 15 21 26 0 1 3 7 11 15 21 26	1 1		26 26	
	Total Weste Cherecteristics Scor (Lergest of 4e. b.1, b.2.)	• 4e. 4b.	13	26	
5 Tergets Ground Weter Use Distance to Necrest Well/Population Served	0 1 2 3 0 4 6 8 10 12 14 18 20 24 30 32 35 40	3		9 40	3.5
	Total Targets Score		39	48	
d if Line 1 is 48, Multiply 1 if Line 1 is 0, Multiply 2] # 4 x 5 C]	hemical iosotive	9,1à6	57.33 0	
Divide Line 6 by 67,330	and Multiply by 100	S'g	, = 5	w = 15	5.9

Sm=15.9 (.73=9

Facility	y Name:	Idaho !	<u>National Eng</u>	ineering Labo	ratory	
Location	n: <u>Idaho</u>	Chemi	cal Process	ing Plant		
EPA Reg	ion: X_	· · ·				
Person(s) in Cha	arge of	Facility:			,
			•		<u> </u>	
Name of	Review:	D. J.	Poland/R. i	. Nebeker	Date:	1-15-86
			Facility:			
CPP-637	Acid Sto	rage A	rea S.W. Co	rner.		
	-		'/			
-						
			*		H	
Score:	S _M = 9					
	SFE =					
	S _{DC} =					

	Ground	d Wate	er Route V	ork Shee	rt			
Rating Factor			signed Value Circle One)		Multi- plier	Score	Max. Score	Ref. (Section
① Observed Release	@		48		1	0	45	3.1
if Observed Release is Giver If Observed Release is Giver				_				
2 Route Cherecteristics Depth to Aquifer of Concern		1 2			2		6	3.2
Net Presipitation Permebility of the Unseturated Zone		1 2	_		7		3	
Physical State	0	1 2	<u> </u>		ţ		3	
	To	tal Rou	rte Cherects	ri stics S co	**	6	16	
3 Containment	0	1 2	③		1	3	3	3.3
Weste Cherecteristics Chemical a. Toxicity/Persistence Hezardous Waste Quantity	• • (3) °	• 12 14 3 4 8	10 6 7 5	1		18 8	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	(0)	1 3	•	21 26 21 26			26 26	1
			et of 4a, b.1		46.	7	26	
Targets Ground Water Use Distance to Nearest Well/Population Served	0 12 24	1 2 4 6 19 18 50 32	3 10 20 35 40		3		9 40	3.5
		To	otal Targets			39	49	
6 If Line 1 is 46, Multiply 1 If Line 1 is 0, Multiply 2			× 🗊		nemical osctive	9,126	87.330	
7 Divide Line 6 by 67,330	end Multi	ply by	100		37	, = S	jw = /3	5.9

5m= 15.9/1.73 = 9

Facility	y Name:	Idaho	<u>National En</u>	gineering Lab	oratory				
Location: <u>Idaho Chemical Processing Plant</u>									
EPA Reg	ion: X								
Person(s) in Cha	rge of	Facility:						
Name of	Review:	<u>D. J.</u>	Poland/R.	L. Nebeker	Date:	1-15-86			
General	Descript	ion of	Facility:						
Grease	Pit South	of CP	P-608,						
			•						
			/						
									
				9					
Score:	S _M = 9								
	SFE =								
	S _{DC} =								
	T.A.1 -								

	Ground \	Nater Route \	Vork Shee	rt			
Rating Factor		Assigned Valu (Circle One)	•	Muiti- piler	Score	Maz. Score	Ref. (Section)
1 Observed Release	⑥	41	3	1	0	45	3.1
If Observed Release is Give If Observed Release is Give							
2 Route Characteristics Depth to Aquifer of Concern	6 1	2 3		2		.6	3.2
Net Precipitation Permebility of the Unseturated Zone		2 3		1		3 3	
Physical State	0 1	2 3		ŧ		3	
	Total	Route Cherect	orieties Sco	r e	6	15	
[] Containment	0 1	2 3		1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence	0 1	8 3 12 14 2 3 4 8	18	1		18	3.4
Hazardous Waste Quantity Radioactive	o (T	2 3 4 5	6 7 8	1		8	•
b.1 Maximum Observed b.2 Maximum Potential	8 1 6 1	3 7 11 18 3 7 11 18	21 26 1	 		26 26	•
		Veste Charecter argest of 4a, b.		4a. 4b.	/3	26	
Tergets Ground Water Use Distance to Necrest Well/Population	0 1	2 3 6 8 10 18 20		3		9 40	3.5
Served	J 24 33	32 35 40					
		Total Targets			39	49	
if Line 1 is 45, Multiply 1 is 0, Multiply 2			C) Radio	emical pactive	9,126	57,330	
☑ Divide Line ⑤ by 57.330	and Multiply	by 100		37	, . S	w = /3	5.9

Sn=15.9/1.73=9

Facilit	y Name: <u>Idaho National Eng</u>	ineering Labo	ratory	ı
Locatio	n: Idaho Chemical Processi	ng Plant		
EPA Reg	ion: X			
Person(s) in Charge of Facility:			
				
Name of	Review: D. J. Poland/R. L	. Nebeker	Date: <u>1-15-86</u>	·
General	Description of Facility:			
Grease	Pit north of CPP-651.			
	· · · · · · · · · · · · · · · · · · ·			
	<u> </u>			
	8			- 0
Score:	S _M = 9			
	SFE =			
	S _{DC} =			

	Ground '	Water Route Wo	ork Sheet	•		
Rating Factor		Assigned Value (Circle One)	Mult pile	170000	Max. Score	Ref. (Section)
① Observed Release	<u></u>	45	1	0	45	3.1
if Observed Release is Given If Observed Release is Give						
Pouts Characteristics Depth to Aquifer of	<u> </u>	2 3	2	•	.6	3.2
Concern Net Precipitation Permebility of the	6) 1	2 3	1	1	3 3	
Unseturated Zone Physical State	0 1		1	<u> </u>	3	
	Tota	l Route Cherecteri	leties Score	6	15	
3 Containment	0 1	2 3	1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezerdous Weste Quantity	0 2	0 3 (12) 14 2 3 4 8	18 1 6 7 8 1		18	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	0 1 0 1	3 7 11 18 3 7 11 18	21 26 1		26 26	
		Weste Charecteris Largest of 4a, b.1.		6. 0	26	
Targets Ground Water Use Distance to Nearest Well/Population Served	0 1 0 4 12 11 24 50	2 3 6 8 10 18 20 3 32 35 40	3	ı	9 40	3.5
		Total Targets S	core	39	49	
If Line 1 is 48, Multiply 1 is 0, Multiply 1] » (4) x 2) x (3) x		Chemic Redicecti	19, 124 10	57.330	
7 Divide Line 6 by 67.330	and Multip	ly by 100		gw = 5	gw = /5	5.9

5m=15.9/1.73=9

Facility	Name: Idaho National Engineering Laboratory
Location	: Idaho Chemical Processing Plant
EPA Regi	on: <u>X</u>
) in Charge of Facility:
Name of	Review: D. J. Poland/R. L. Nebeker Date: 1-15-86
General	Description of Facility:
Service	Waste Line from PEW to CPP-751 (PEW evaporator overheads).
	· · · · · · · · · · · · · · · · · · ·
	\
Score:	S _M = 9
	S _{FE} =
	S _{DC} =
	Tabal - A

	Groun	d W	ater	Route	Wor	k She	et			
Rating Festor			Assign (Circ	ned V de On			Muiti- plier	Score	Max. Score	Ref. (Section)
1 Observed Release	<u> </u>	,			45		1	0	45	3.1
If Observed Release is Given										
Provide Characteristics Depth to Aquifer of Concern	6		2 3				2		.6	3.2
Net Precipitation Permebility of the Unacturated Zone	0	1	2 3	•			1		3	
Physical State	0	1	2 3)			ŧ	,	3	
	T	otal l	Route	Cher	atorial	ios Sc	910	6	18	
3 Containment	0	1	2 3)		***	1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezardous Waste Quantity	0	3	• (a 2 (3	12	14 11 5 6	7	1 1		18	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	©	1	3 7	11	15 2°		1		26 26	
	To				teristic b.1, b		ro 4e. 4b.	12	26	
Targets Ground Water Use Distance to Necrest Well/Population Served	0 12 24	1: 4 9 30	2 (3 6 8 18 2 32 3	10			3		9 40	3.5
			Tota	Terg	rts Sci			39	49	
(if Line 1) is 48, Multiply (in the 1) is 0, Multiply (in the 1) is 0, Multiply				5)		Red	Chemical dioactive	8,424	57,330	
Divide Line 1 by 67.330	and Mul	tiply	by 10	0			37	, . 5	jw = /4	1.7

Sm= 14.7/1.73 =9

Facilit	y Name:	<u>Idaho</u>	National En	gineering Lab	oratory	
Locatio	n: <u>Idaho</u>	Chemi	cal Process	ing Plant		
Location: Idaho Chemical Processing Plant EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker General Description of Facility: Organic Solvent and Misc. Storage Area W. of CPP-660.						
Person(PA Region: X erson(s) in Charge of Facility:					
					· · · · · · · · · · · · · · · · · · ·	
Name of	Review:	D. J.	Poland/R.	L. Nebeker	Date:	1-15-86
General	Descript	cion of	Facility:			
<u>Organic</u>	Solvent	and Mi	sc. Storage	Area W. of CP	P-660.	
			,			
···						
			*			
Score:	S _M = 8					
	SFE =					
	S _{DC} =					
	Total =	8				

	Ground V	Vater Rou	te Work She	rt			<u>-</u>
Rating Factor		Assigned \(\(\mathref{Circle}\)		Multi- plier	Score	Max. Score	Ref. (Section)
① Observed Release	<u> </u>		45	1	0	48	3.1
If Observed Release is Give If Observed Release is Give							
Acute Characteristics Depth to Aquifer of Concern	6 1	2 3		2		.6	3.2
Net Precipitation Permebility of the Unseturated Zone	@ 1			1		3	
Physical State	0 1	2 3		ŧ		3	
	Total	Route Che	ectoristics Sca	re	6	16	
Centainment	0 1	2 3		1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezerdous Weste Quantity	3	6 3 13 2 3 4) 14 18 8 6 7 :	1 B 1		18	3.4
Redicective b.1 Maximum Observed b.2 Maximum Potential	0 1 Ø 1	3 7 11		1		26 26	
		faste Chere orgest of 4a	st eristics Score . b.1, b.2.)	44. 4b.	13	26	
Targets Ground Water Use Distance to Necrest Well/Population Served		2 (3) 6 8 10 18 20 32 38 40		3		9 40	3.5
		Total Targ			33	49	
(if Line) is 48, Multiply (if Line) is 0, Multiply (i			Ci Radi	nemicai osctive	7,7,22	57,330	
7 Divide Line () by 67,330	end Multiply	by 100		5,	, - 3	w • 18	3.5

5m=13.5/1.73=8

Facility	Name:	<u>Idaho</u>	<u>National En</u>	gineering Labo	ratory	
Location	: <u>Idah</u>	o Chemi	cal Process	ing Plant		
EPA Regi	on: <u>X</u>					
Facility Name: Idaho National Engineering Laboratory Location: Idaho Chemical Processing Plant EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: YDB-105 HF Tank Neutralization Pit Dry Well Score: S _M = 8 S _{FE} =						
Name of	Review:	<u>o. J.</u>	Poland/R.	L. Nebeker	Date:	1-15-86
General	Descrip	tion of	Facility:			
YD8-105	HF Tank					
<u>Neutrali</u>	zation	Pit				
			,			
						:
			*			
Score:	S _M = 8					
	SFE =					
	S _{DC} =					
		_				

	Groui	nd \	Nat	er A	out	Wo	rk Sh	100t				
Rating Festor				•	ed V				Aulti- plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0					45			1	0	45	3.1
If Observed Release is Give If Observed Release is Give								-				
Plante Characteristics Depth to Aquifer of Concern	©		2	_					2		.6	3.2
Net Precipitation Permobility of the Unseturated Zone	0								1		3	1
Physical State	0	1	2	9					ş		3	
	1	otal	Re	ute (here	etoria	des S	icore		6	15	
[3] Containment	0	1	2	3					1	3	3	3.3
Weste Characteristics Chemical		_			1							3.4
a. Toxicity/Persistence Hezardous Weste Quantity	0	1	٨	(3)	4	14 1	7	\$	1		18	٠
Radioactive b.1 Maximum Observed b.2 Maximum Potential	8	1	3	Ż	1.1	15 2 15 2	1 26	1			26 26	
	To					teristi b.1, b		010	4a. 4b.	1/0	26	
Targets Ground Water Use Distance to Nearest Well/Population Served	0 12 12	* 4 14	2 6 18 32	② 20 35	10 40				3		9 40	3.5
 		_		adel 5					· · · · · · · · · · · · · · · · · · ·	20	49	
6 If Line 1 is 48. Multiply 5	7 . [7]	_ r		-(21	argu	ts Se		Che	nio ei	39		
If Line [] is 0, Multiply []	=		_	= [3]			Re	dios	gtive	7,7	57,33 0	
Divide Line 📵 by-67,330	end Mut	tiply	Þγ	100					37	, . S	w = /3	.5

SM=13.5/1.73=8

Facility	y Name:	Idaho M	National Eng	gineering Labo	ratory	
Location	n: <u>Idah</u> c	Chemic	al Process	ing Plant		
EPA Reg	ion: X					
Person(s) in Cha	arge of	Facility:			
Name of	Review:	<u>o. J.</u>	Poland/R.	L. Nebeker	Date:	1-15-86
General	Descrip	tion of	Facility:			
Limesto	ne Pit b	y CPP-6	01 and Fren	ch Drain.		
			<u>; </u>			
			/			
						
			×			
Score:	S _M = 7	.,,,				
	SFE =					
	S _{DC} =					
	Total =	7				

	Groui	nd V	Vete	er Rou	e Wor	k Shee	t			
Rating Factor				signed \ Circle O			Muiti- plier	Score	Max. Score	Ref. (Section
1 Observed Release	0				45		1	0	45	3.1
If Observed Release is Give If Observed Release is Give						4. 2.				
Route Cherecteristics Depth to Aquifer of Concern		1	â				2		.6	3.2
Net Precipitation Permebility of the Unseturated Zone	9	1	2	3			1		3	
Physical State	Ô	î	2	<u>O</u>		_	ıΣ		3	
	7	otal	Rou	rte Cher	ectorist	les Sco	•	6	16	
3 Containment	0	1	2	(3)			1	3	3	3.3
Weste Characteristics Chemical	_	_	_	<u></u>						3.4
a. Toxicity/Persistence Hazardous Waste Quantity	0	٥	2	3 4	14 18	7 8	• •		18	•
Radioactive b.1 Meximum Observed b.2 Meximum Potential	S	1	3/	7 11 7 11	15 21 15 21	26 1 26 1	1		26 26	
	To				steristic , b.1, b.		4e. 4b.	10	26]
Targets Ground Water Use Distance to Nearest Well/Population	00123			3 8 10 20 25 40			3		9 40	3.5
Served	<i>3</i> . ≰ €	9	34	35 40						
			To	tel Targ	ets Sco			39	49	
if Line 1 is 48, Multiply (· [5]		Ch Radio	emical ective	7.020	67,330	
7 Divide Line 🖥 by 67.330	and Mut	tipiy	by 1	00			S'	, • S	w * /2	1.2

Sm = 12.2/1.73 = 7

Facilit	Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: Drainage Ditch by CPP-637 (West).							
Location: Idaho Chemical Processing Plant EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker Date: 1-15-86 General Description of Facility: Drainage Ditch by CPP-637 (West).								
EPA Reg	ion: <u>X</u>							
EPA Region: X Person(s) in Charge of Facility: Name of Review: D. J. Poland/R. L. Nebeker General Description of Facility: Drainage Ditch by CPP-637 (West).								
		· · · · · · · · · · · · · · · · · · ·						
Name of	Review: D. J. Poland/R.	. L. Nebeker	Date:	1-15-86				
General	Description of Facility:	:						
Drainag	e Ditch by CPP-637 (West).						
	/							
	v							
Score:	S _M = 7							
	S _{FE} =							
	S _{DC} =							

	Ground	Water Route Work S	iheet			
Rating Factor		Assigned Value (Circle One)	Muiti- plier	Score	Max. Score	Ref. (Section)
① Observed Release	@	45	1	0	48	3.1
If Observed Release is Given If Observed Release is Give			_			
Route Cherecteristics Depth to Aquifer of	@ 1	2 3	2	11	.6	3.2
Concern Net Precipitation Permebility of the	0	2 3	1		3	
Unsaturated Zone Physical State		2 3	ţ		3	
	Tot	tal Route Cherecteristics	Score	6	15	
3 Containment	Ō '	2 3	1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezardous Waste Cuantity	0 2	3 6 (3) 12 14 18 1) 2 3 4 8 6 :	7 8 1		18	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	<u>&</u> :	7 11 18 21 2 7 11 15 21 2			26 26	_
	Tota	Weste Characteristics & (Largest of 4a, b.1, b.2.)		10	26	
Targets Ground Water Use Distance to Nearest Well/Population Served	0 0 12 24	1 2 3 4 6 8 10 6 18 20 6 32 38 40	3		9 40	3.5
		Total Tergets Score		39	49	
If Une 1 is 45, Multiply 5 if Une 1 is 0, Multiply			Chemical Radioective	7,000	57.33 0	
7 Divide Line (1) by 67.330	end Multip	ply by 100	5'5	" = S	• " /a	ء. <u>ک</u>

5m=12.2/1.73=7

Facilit	y Name:]	daho Na	tional Eng	ineering Labo	ratory		
Location	n: <u>Idaho</u>	Chemica	l Processi	ng Plant			
EPA Reg	ion: X				·····		
Person(s) in Chai	FE =					
							, 11.01
Name of	Review:	<u>D. J. P</u>	oland/R. L	. Nebeker	Date:	1-15-86	
General	Descript	ion of F	acility:				
Nitric .	Acid Seepa	age by C	PP-734.				
		801 - 17					
-			×				
Score:	S _M = 7						
	SFE =						•
	S _{DC} =						

	Groun	d W	iter A	oute W	ork She	rt			
Rating Feetor				ed Value le One)		Multi- plier	Score	Maz. Score	Ref. (Section)
① Observed Release	0			45		1	0	45	3.1
If Observed Release is Given If Observed Release is Give									
2 Route Cherecteristics Depth to Aquifer of Concern	_	1				2		.\$	3.2
Net Precipitation Permebility of the Unsaturated Zone	0	1 3				1		3	
Physical State	9	1	2 3			ţ		3	
	T	A lese	oute (herecter	istics Sco	K.	6	15	
3 Containment	0	1 :	2 (3)			1	3	3	3.3
Weste Cheresteristics Chemical					4-				3.4
a. Toxicity/Persistence Hazardous Waste Guentity	0 ((3)	2 3	4 8	18 7	8 1		18 8	•
Redicective b.1 Meximum Observed b.2 Meximum Potential	8	1 :		11 15		1		26 26	_
	Tot			lerecteris f 4e, b.1,	rties Scor b.2.)	• 4e. 4 <u>b.</u>	10	26	
Targets Ground Water Use Distance to Necrest Well/Population Served	0 124	15 1	2 3 6 8 18 20 12 38	្ត 10		3		9 40	3.5
1							<u> </u>		1
				Targets S			39	49	
6 If Line 1 is 45, Multiply 1 if Line 1 is 0, Multiply 2]	C Redi	hemicsi icective	7,020	57.330	
Divide Line (1) by 87.330	and Mult	ibia p	y 100			S'	, . S	- /:	3.2

5m = 12.2/1.73 = 7

Facilit;	y Name:	Idaho	National Eng	ineering Labo	ratory	
Locatio	n: <u>Idah</u> o	Chemi	cal Processi	ng Plant		
EPA Reg	ion: <u>X</u>					
Person(s) in Cha	arge of	Facility:			
Name of	Review:	<u>D. J.</u>	Poland/R. L	. Nebeker	Date:	1-15-86
General	Descript	tion of	Facility:			
Gravel	Pits #1.	#2 Are	.			_
			*			
Score:	S _M = 7					
	SFE =					
	S _{DC} =				·	

Total = 7

	Grou	nd '	Nat	er A	loute	Wo	rk Sł	100t				
Rating Factor					ed Va le On				Aulti- piler	Score	Mex. Score	Ref. (Section
① Observed Release	0)			•	45			1	0	45	3.1
If Observed Release is Give If Observed Release is Give								•				1
Pourte Cherecteristics Depth to Aquifer of Concern	0		2	3				-	2		6	3.2
Net Precipitation Permebility of the Unacturated Zone				3					1		3 3	
Physical State	0	1	2	<u> </u>					.Ę		3	
	1	otal	Ro	ute C	here	rtoria	des S	core		6	15	
3 Containment	Õ	Î	2	0				-	Î	3	3	3.3
Weste Cherecteristics Chemical												3.4
s. Toxicity/Persistence Hezerdous Waste Quentity Radioactive	0	3	6 2	(12 1	14 11 5 6	7	3	1		18	
b.1 Maximum Observed b.2 Maximum Petential	0	1	3	3	11 1 31 1	5 21 5 21	26 26	1			26 26	
	To	tel V	PL 60	e Ch	erect 44, t	pristic	a Sci		4e. 4b.	10	26	
5 Tergets Ground Water Use Distance to Nearest Well/Population Served	0 12 24			3 20 35					3		9 40	3.5
{			To	otal T	erget	s Sca				39	49	
6 If Line 1 is 48, Multiply 1 If Line 1 is 0, Multiply 2		* [=				Ra	Cher	nicel stive	7,020	57.330	
7 Divide Line 1 by 67,330	and Mult	liply	by '	100					S'	- S ²	w = 12	. 2

Sm= 12.2/1.73=7

Facility M	Name: <u>Idah</u> o	National Eng	ineering Labo	ratory		
Location:	Idaho Chem	nical Processi	ng Plant			
EPA Region	n: <u>X</u>				***	
Person(s)	in Charge o	of Facility:				
Name of Re	eview: <u>D. </u>	J. Poland/R. L	. Nebeker	Date:	1-15-86	<u> </u>
General De	escription o	of Facility:				
CPP-621 Ac	id Storage	Area.				
		/				
					·	
		٧				_
Score: Sp	4 = 7					
Sp	FE =					
s _c	oc =					
_						

	Grou	nd V	Vat	er Rout	e Work	Shee	t			
Rating Factor				signed V Circle Or			Multi- plier	Score	Mes. Score	Ref. (Section
① Observed Release	<u> </u>				45		1	0	45	3.1
If Observed Release is Give If Observed Release is Give						4. 7.				
Plante Cherecteristics Depth to Aquifer of Concern		1	2	3			2		.6	3.2
Net Precipitation Permebility of the	0	1	2	3			7		3 3	
Unesturated Zone Physical State	0	1	2	Ø			ŧ		3	. =.
:	Т	otal	Ro	ute Cheri	eteriotic	s Scor	•	6	18	
(3) Containment	ō	î	2	3			1	3	3	3.3
Weste Characteristics Chemical				<u> </u>				······································		3.4
 a. Toxicity/Persistence Hezardous Waste Quantity 	0	ð	6 2	9 12	14 18	7 8	1		18	
Radioactive b.1 Maximum Observed b.2 Maximum Potential	ô	1	3	•	18 21 18 21				26 26	
	To			e Cherec			4a. 4b.	10	26	
Tergets Ground Water Use Distance to Nearest Well/Population	00	15		Ø 10	·· · · · · · · · · · · · · · · · · · ·		3		9 40	3.5
Served] 24	39	32	35 40						
			T	ptal Targe	nts Score			39	49	
6 If Line 1 is 48, Multiply 5 If Line 1 is 0, Multiply 5			_	× 🚯		Ch Radio	emical ective	7,020	67.33 0	
Divide Line 🔳 by-87,330	and Mult	Hply	by	100		-	3'5	, - 5	w * /2	. <u>بر</u>

5m=12.2/1.73=7

Facilit	y Name: <u>Idaho National Engi</u>	ineering Labo	ratory		
Locatio	n: <u>Idaho Chemical Processir</u>	ng Plant			
EPA Reg	ion: <u>X</u>				
Person(s) in Charge of Facility:				
	-				
	-				
Name of	Review: D. J. Poland/R. L.	Nebeker	Date:	1-15-86	
General	Description of Facility:				
Peach B	ottom Cont. Soil Storage Are)a.		· · · · · · · · · · · · · · · · · ·	1
· · · · · · · · · · · · · · · · · · ·					
					
	٧				
Score:	S _M = 7				
	SFE =				
	S _{DC} =				

	Groun	d W	ater Ro	ute Wo	rk Shee	•			
Rating Factor			Assigne (Circle			Multi- plier	Score	Max. Score	Ref. (Section
1 Observed Release	<u> </u>			45		1	0	48	3.1
If Observed Release is Given If Observed Release is Given									
Route Cherecteristics Depth to Aquifer of	<u>@</u>	1	2 3			2		.6	3.2
Concern Net Precipitation Permebility of the	0	1	² ³			7		3 3	
Unceturated Zone Physical State	0	1	2 3			ŧ.		3	
	Ţ	otal	Route C	herecteric	rties Sco	re	6	15	
3 Containment	0	1	2 3			1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezerdous Weste Quantity Radioactive	8	3	6 5 2 3	12 14 1 4 8	! 8 ● 7 :	1		18	3.4
b.1 Meximum Observed b.2 Meximum Potential	0	1 1	3 7 3 7 (11 18 2 11 18 2 erectorist	21 26 1 21 26 1	1	T 4	26 26	1
		(L	rgest of	4a, b.1,	b.2.)	46.		26	
Tergets Ground Water Use Distance to Necrest Well/Population Served	24	16	2 6 6 8 18 20 32 35	10 40		3		9 40	3.5
			Total 1	largets Sc	8016		33	49	
(if Line 1 is 45, Multiply (if Line 1 is 0, Multiply (if					_	hemica cactive	6,534	57.33	
7 Divide Line (1 by 67.330	and Mul	tiply	by 100			s,	"• \$	* /	1.4

Sm=11.4/1.73=7

Facility	/ Name: <u>I</u>	iaho National En	gineering Labo	ratory	
Location	n: <u>Idaho (</u>	Chemical Process	ing Plant		
EPA Reg	ion: X				
Person(s) in Charg	e of Facility:			
Name of	Review: (). J. Poland/R.	L. Nebeker	Date:	1-15-86
General	Description	on of Facility:	•		
CPP-603	to CPP-604	transfer line	leak by Peach	Bottom.	
		`			
	-				
		*			
Score:	S _M = 4				
	SFE =				
	S _{OC} =				
	Total =	4			

	Groun	id V	Vate	r Ro	ute V	/ork	Shee	rt			
Rating Factor				igned Circle	Value One)			Muiti- plier	Score	Max. Score	Ref. (Section)
① Observed Release	©				46			1	0	45	3.1
if Observed Release is Give if Observed Release is Give							4). 2).				
2 Route Characteristics Depth to Aquifer of Concern	6		2	3				2		.6	3.2
Net Precipitation Permebility of the Unseturated Zone	6							1		3 3	
Physical State	0	1	2	3				ż		3	,
	7	otal	Rou	te Ch	araete	rietie	s Sco	re	6	15	
Containment	0	1	2 (1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence	6	3	•	• 1	2 14	12	<u> </u>	•		18	3.4
Hezardous Weste Quantity	3	3	2	3	2 14 4 B	•	7	i		•	
Radioective b.1 Maximum Observed b.2 Maximum Potential	0	1	3 (1 18 1 18			1 1		26 26	
	To				rectori			44. 4b.	9	26	
Targets Ground Water Use Distance to Necrest Well/Population	00.12	† 4 16	2 6 18	3				3		9 40	3.5
Served		30	32	35 4	10						
			To	tal Ta	rgets	Score	•		33	40	
6 If Line 1 is 48, Multiply 5 If Line 1 is 0. Multiply 2			_	. 🔞			_	hemical oective		57,33 0	
☑ Divide Line 📵 by-67.330	and Mut	tipiy	by 1	00				S' ₅ ,	, . 5	·· · 7.	3

5m = 7.3/1.73 = 4

Facilit	y Name: <u>Id</u>	ano National Er	ngineering Labo	ratory	
Locatio	n: <u>Idaho C</u>	hemical Process	sing Plant		
EPA Reg	ion: X				
Person(s) in Charg	e of Facility:		<u></u>	
Name of	Review: <u>D</u>	. J. Poland/R.	L. Nebeker	Date:	1-15-86
General	Descriptio	n of Facility:			
CPP-603	Temp. Stor	age Area (Bone	yard) (Laydown	Area).	
		`.			
		<u> </u>			
			n		
Score:	S _M = 4				
	SFE =				•
	S _{DC} =				
	Tabal - 4				

	Ground	Water R	oute Work Sh	eet			
Rating Factor			ed Value e One)	Multi- piler	Score	Max. Score	Ref. (Section)
① Observed Release	o		45	1	0	45	3.1
If Observed Release is Give If Observed Release is Give							
Popular Characteristics Depth to Aquifer of Concern	3			2		.6	3.2
Net Precipitation Permebility of the Unesturated Zone	(g)	1 2 3		1		3	
Physical State	0	1 2 🚱		ŧ	····	3	
	To	tal Route C	herecteristics &	30 7 0	6	15	
3 Centainment	0	1 2 3		1	3	3	3.3
Weste Characteristics Chemical e. Toxicity/Persistence Hezerdous Weste Quentity	99	3 6 9 1 2 3	12 14 18 4 8 8 7	3 1		18	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	0		11 15 21 26 11 15 21 26	1		26 26	_
	Tota		ierectoristics Sco f 4e, b.1, b.2.)	76 46. 46.		26	
Targets Ground Water Use Distance to Nearest Well/Population Served		1 2 3 4 6 8 16 18 20 30 32 38	· -	3		9 40	3.5
			Targets Score		33	49	
6 If Line 1 is 48, Multiply (If Line 1 is 0, Multiply			_	Chemical dioactive		57.330	
Divide Line 6 by 67.330	and Multi	ply by 100		s'	" · 5	i • 7.	3

Sm=7.3/1.73=4

Facilit	y Name: <u>Idah</u>	o National Eng	ineering Labo	ratory	
Locatio	n: <u>Idaho Che</u>	mical Processi	ng Plant		
EPA Reg	ion: <u>X</u>	<u> </u>			<u> </u>
Person(s) in Charge	of Facility:			
Name of	Review: D.	J. Poland/R. L	. Nebeker	Date:	1-15-86
General	Description	of Facility:			
Fuel St	orage Basin -	Dry Well			
		\			
			Λ\$		
Score:	S _M = 4				
	SFE =				
	S _{DC} =				
	T. b. 3 4				

	Grou	nd \	Vat	er A	out	• W	ork	She	let				
Rating Factor				eign Circ		'elue ne)				uiti- ier	Score	Max. Score	Ref. (Section
① Observed Release	<u> </u>)				45				1	0	45	3.1
If Observed Release is Give If Observed Release is Give								4. 71.					
Planta Characteristics Depth to Aquifer of Concern	<u> </u>	1	2	3						2		.6	3.2
Net Precipitation Permebility of the	0	1	2	3						1		3 3	
Unseturated Zone Physical State	0	1	2	Ø						ţ		3	
	7	otal	Ro	rte (her	ete	riottic	3 0	010		6	15	
3 Containment	0	1	2	3						1	3	3	3.3
Weste Characteristics Chemical													3.4
a. Toxicity/Persistence Hezardous Waste Quantity	8	1	2	3	12	14	18	7	•	1		18	
Redicactive b.1 Meximum Observed b.2 Meximum Potential	0	1	3	3	11	15 15	21 21		1			26 26	
	To					teris		Sco	f0	4a. 4b.	9	26	
Targets Ground Water Use Distance to Negrest Well/Population	00	* 4 16	2 6 18	3	10					3 1	<u> </u>	9 40	3.5
Served	**************************************		32	38	40					_			
			Ť	itel '	Terg	ets S	icer	•			33	49	
(if Line (1) is 48, Multiply (2) If Line (3) is 0, Multiply			_	. (1	}				ioed		4.158	57.330	
Z Divide Line 📳 by 67,330	and Mul	tiply	by	100					<u> </u>			· · 7.	3

5m=7.3/1.73=4

Facility	y Name: <u>Idaho National Engineering Laboratory</u>
Location	n: <u>Idaho Chemical Processing Plant</u>
EPA Reg	ion: <u>X</u>
Person(s) in Charge of Facility:
Name of	Review: D. J. Poland/R. L. Nebeker Date: 1-15-86
	Description of Facility:
Trench	East of CPP-603 Fuel Storage Basin.
	`.
·	
	·
Score:	S _M = 4
	S _{FE} =
	S _{DC} =
	Total a A

	Groun	id W	ater Ro	ute Work	Sheet			
Rating Factor			Assigne (Circle		Muit pile	30000	Mex. Score	Ref. (Section
① Observed Release	0			48	1	0	45	3.1
If Observed Release is Give If Observed Release is Give					4. 2.			
2 Route Cherecteristics Depth to Aquifer of Concern	6	1	2 3		2		.6	3.2
Net Precipitation Permebility of the Unseturated Zone	0	1	2 3		1		3 3	
Physical State	0	1	2 3		.F		3	
	Ţ	otal l	Route Ci	erectoristics	s Score	6	15	
3 Containment	Ô	î	2 3		1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezardous Weste Quantity Radioactive	96	3	6 5 1	12 14 18 4 8 8	7 8 1		18	3.4
b.1 Meximum Observed b.2 Meximum Potential	0 0 Tet		3 7	1 15 21 : 11 15 21 : recteristics :	26 1 Score 4		26 26	
Tergets Ground Water Use Distance to Nearest Well/Population Served	o Ha	16 1 30.	2 3 6 8 18 20	<u>4e, b.1, b.2.</u> 10 40) 4t	3	9 40	3.5
Į.		_	Total To	rgets Score		33	49	
6 If Line 1 is 46, Multiply 1 if Line 1 is 0, Multiply					Chemics Redicactiv		5 7,330	
7 Divide Line 1 by 67,330	and Mult	liply t	y 100	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		w · 7.	3

Sm=7.3/1.73=4

Facilit	y Name: Idaho National Engineering Laboratory
Locatio	n: Idaho Chemical Processing Plant
EPA Reg	ion: X
Person(s) in Charge of Facility:
Name of	Review: D. J. Poland/R. L. Nebeker Date: 1-15-86
General	Description of Facility:
WM-181	transfer line to PEW evaporator.
	N
Score:	S _M = 2
	SFE =
	S _{DC} =

	Groun	d Wa	ter R	oute W	ork Sh	9 9 1			
Rating Factor	Assigned Value Multi- (Circle One) piler							Mex. Score	Ref. (Section)
① Observed Release	0			45		1	0	45	3.1
If Observed Release is Given If Observed Release is Given									
Route Characteristics Depth to Aquifer of Concern	<u>@</u>	1 2	3			2			3.2
Net Precipitation Permebility of the Unesturated Zone	Q	1 2	3			1		3 3	
Physical State	0	1 2	<u>3</u>			į		3	
	T	otel Ro	oute C	herects	rictics S	6018	6	15	
3 Containment	0	1 2	(3)			1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hezerdous Waste Quantity	9	3 6 1 2	\$ 3	12 14 4 8	18 6 7	1 8 1		18	3.4
Radioactive b.1 Maximum Observed b.2 Maximum Potential	0	1 3			21 26 21 26			26 26	
	Tot			erector 4e, b.1	isties Sei , b.2.}	ore 4e. 4b.	3	26	
Tergets Ground Water Use Distance to Nearest Well/Population Served	0 12 24	19 1	8 8 20	10 40		3		9 40	3.5
		•	rotal '	Targets	Sacre		39	49	
If Line 1 is 45. Multiply 1 if Line 1 is 0. Multiply	= ==		× [3)	Ro	Chemical Idioactive		57,330	
7 Divide Line () 57.330	and Muk	tiply by	100			s;	 \$	 • 3	7

Sm=3.7/1.73=2

Facilit	y Name: <u>Id</u>	aho Natio	onal Eng	ineering La	boratory	
Locatio	n: <u>Idaho C</u>	nemical [rocessi	ng Plant		
EPA Reg	ion: X					
Person(s) in Charge	e of Fac	ility:			
Name of	Review: <u>D</u>	. J. Pola	ind/R. L	. Nebeker	Date:	1-15-86
General	Description	of Faci	ility:			
01d Sew	age Treatme	nt drain	tiles a	nd outfall	line.	
			**			
Score:	S _M = 1					
	SFE =					
	S _{DC} =					
	Total = 1					

Groun					2000				
(Circle One) Multi-							Score	Max. Score	Ref. (Section
6			4	6		1	0	45	3.1
					=				
	1 :	2 3				2		.6	3.2
9	1 3	3	3			1		3 3	
0	1					#		3	
T	otal F	oute (Chareet	eristic	s Sco	10	6	15	
Ō	1 3	2 3)			Ť	3	3	3.3
6 0	3 (8 \$	12 14 4 5	4 18 6	7	1		18	3.4
0 (<u> </u>	3 Ž	11 11	3 21	26	1		26 26	ì
101						46. 46.	9	26	
) 0 124	19 1	2 (3 6 8 18 20 12 38	10			3		9 40	3.5
		Total	Targeti	Score)		39	49	
					•	nemical cactive	702	57.330	
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total March 14 12 14 30 1	Assign (Circ	Assigned Velo (Circle One)	Assigned Value (Circle One) 45 In a Score of 45, Proceed to Line in a Score of 0, Proceed to Line 0 1 2 3 0 1 2 3 0 1 2 3 0 1 2 3 Total Route Characteristic 0 1 2 3 0 1 2 3 1 1 18 21 1 2 3 4 5 6 0 1 3 7 11 18 21 Total Weste Characteristics (Largest of 44, b.1, b.2 1 2 3 4 5 10 1 2 3 4 5 6 1 3 7 11 15 21 Total Weste Characteristics (Largest of 44, b.1, b.2 1 2 3 4 5 6 1 3 7 11 15 21 Total Weste Characteristics (Largest of 44, b.1, b.2 1 1 2 3 4 5 6 1 2 3 5 10 1 2 3 5 10 1 3 7 11 15 21 Total Targets Score	Assigned Value (Circle One) 48 In a Score of 45, Proceed to Line 4. In a Score of 0, Proceed to Line 2. 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 3 7 11 18 21 26 1 2 3 4 8 6 7 1 2 3 4 8 6 7 1 2 3 4 8 6 7 1 2 3 4 8 6 7 1 2 3 4 8 6 7 1 2 3 4 8 6 7 1 2 3 4 8 6 7 1 2 3 4 8 6 7 1 3 7 11 15 21 26 1 2 3 4 8 6 7 1 3 7 11 15 21 26 2 3 7 11 15 21 26 2 3 7 11 15	(Circle One) piler (O) 45 1 In a Score of 45, Proceed to Line 4. In a Score of 0, Proceed to Line 2. (O) 1 2 3 (O) 1 3 7 11 18 21 26 1 (O) 1 3 7 11 18 21 26 1 (Largest of 4a, b.1, b.2.) 4b. (O) 1 2 3 (O) 1 3 7 12 14 18 (O) 1 3 7 13 18 21 26 1 (Largest of 4a, b.1, b.2.) 4b. (O) 1 2 3 (O) 1 3 7 13 15 21 26 1 (Largest of 4a, b.1, b.2.) 4b. (Chemical	Assigned Value (Circle One) Multipiler	Assigned Value (Circle One) Multiplier Score Max. Score 0

Sm = 1.2/1.73 = 1

Facility Name: <u>Idaho National E</u>	ngineering Labo	ratory	
Location: <u>Idaho Chemical Proces</u>	sing Plant		
EPA Region: X			
Person(s) in Charge of Facility:			·
Name of Review: $\underline{D. J. Poland/R.}$	L. Nebeker	Date:	1-15-86
General Description of Facility:			
NE corner of South Basin (CPP-60	3).		
4			
	ч.		
Score: S _M = 1		·	
S _{FE} =			•
S _{DC} =			
T-4-1 - 1			•

Rating Festor				igned V ircle O			Muiti- piler	Score	Mex. Score	Ref. (Section
1 Observed Release	<u></u>				45		1	0	45	3.1
If Observed Release is Give If Observed Release is Give						4. 7.				
Route Characteristics Depth to Aquifer of	<u></u>	1	2	3			2		.6	3.2
Concern Net Precipitation Permebility of the	0	1	2 2	3			1		3	
Unestursted Zone Physical State	0	1	2 (<u> </u>			Ę		3	
	T	otal	Rou	te Cher	seterist	es Sco	~	6	18	
3 Containment	Ō	1	2 (9			1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence Hazardous Waste Quantity	9	3	6 2	9 12 3 4	14 18 5 6	7	1		18	3.4
Redioactive b.1 Maximum Observed b.2 Maximum Potential	0	1	3		18 21 15 21	26	1		26 26	-
	To				steristic , b.1, b.		46.	9	26	
Targets Ground Water Use Distance to Nearest Well/Population Served		1 4 16 30	2 6 18 32	3 10 20 38 40) }		3 1		9 40	3.5
			Te	ital Terr	jets Sec	ere		33	49	
If Line 1 is 45, Multiply 1 if Line 1 is 0, Multiply	11 = (3) 21 = (3)	x [· (B)		_	hemica iosctive		57.33	

Sm= 1.04 1.73=1

Facility Name: <u>Idaho National Engineering Laboratory</u>										
Location	n: <u>Idaho Chemical Processing Plant</u>									
EPA Reg	ion: X									
Person(s) in Charge of Facility:									
Name of	Review: D. J. Poland/R. L. Nebeker Date: 1-15-86									
General	Description of Facility:									
Undergr	ound carbon steel line leak of 21,000 gal. at CPP-603 (1973)									
	4									
Score:	S _M = 1									
	S _{FE} =									
	S _{DC} =									

	Ground \	Nater Rout	e Work Shee	rt	···		
Rating Feator		Assigned V (Circle Or		Multi- plier	Score	Mex. Score	Ref. (Section
1 Observed Release	0		45	1	0	45	3.1
If Observed Release is Given If Observed Release is Given							
Route Cherecteristics Depth to Aquifer of Concern	<i>@</i> 1	2 3		2		.6	3.2
Net Precipitation Permebility of the	<i>@</i> ;	2 3 2		1		3 3	
Unceturated Zone Physical State	0 1	2 3		ŧ		3	
	Tota	Route Char	ectoristics Sco	re	6	15	
3 Containment	0 1	2 3		1	3	3	3.3
Weste Characteristics Chemical a. Toxicity/Persistence	Q 3	6 9 12	14 18 5 6 7	1	·	18	3.4
Hezerdous Weste Quentity Redioactive	6) 1	2 3 4	5 6 7	3 1		8	·
b.1 Maximum Observed b.2 Maximum Potential	° 1			1 1		26 26	•
		Neste Chare argest of 4s.	teristics Scor , b.1, b.2.)	44. 46.	9	26	
Targets Ground Water Use Distance to Necrest Well/Population	0 1	2 3 10 6 8 10		3		9 40	3.5
Served		32 35 40					
	,	Total Targ	ets Score		33	49	
6 If Line 1 is 48, Multiply 1 If Line 1 is 0, Multiply 2			_	hemical ioective	59 Y	57,330	
Divide Line 1 by 67.330	end Multiply	y by 100		3'5	, = S	* * /.	O4

5m=1.04/1.73=1

APPENDIX E

GLOSSARY AND ABBREVIATIONS

AEC Atomic Energy Commission; predecessor to the

Department of Energy

ANL-W Argonne National Laboratory-West

<u>Alluvium</u> Sediment deposited by flowing water.

Aquifer A zone of permeable rock on soil which is

saturated with water.

Calcination A process where liquid waste is sprayed onto the

surface of hot granular particles as they are

being agitated in a vessel. The liquid evaporates, and the solids adhere to the

particles.

<u>Calcine</u> Solids with the consistency of sand mixed with

powder produced by the calcination process.

<u>Cask</u> A massive shipping container which provides

shielding from highly radioactive materials.

<u>CERCLA</u> The Comprehensive Environmental Response,

Compensation, and Liability Act.

CFA Central Facilities Area; an INEL area.

CH Chicago Operations office of the DOE.

·

radioactive substance) defined as 3.7×10^{10} (37)

billion) disintegrations per second.

A unit of radioactivity (decay rate of a

<u>Decay</u> The spontaneous transformation of one nuclide into

a different nuclide or into a different energy

state of the same nuclide.

<u>Decontamination</u> The selective removal of radioactive material from

a surface or from within another material.

Diurnal Having daily cycles.

Curie

DOE Department of Energy

EG&G Idaho Prime operating contractor for the INEL.

ENICO Exxon Nuclear Idaho Company; operating contractor

at the INEL.

ESRP Eastern Snake River Plain.

Fission Products A nuclide produced by the fission of a heavy

element or the daughter(s) resulting from the radioactive decay of the nuclide thus formed.

Fuel Processing Recovery of unused nuclear fuel from used fuel

elements.

Groundwater Water beneath the earth's surface between or with

in saturated soil and rock.

Halflife The time required for one-half the atoms of a

particular nuclide to disintegrate by radioactive

decay.

<u>HRS</u> Hazard Ranking System.

<u>ICPP</u> Idaho Chemical Processing Plant.

ID Idaho Operations Office of the DOE.

INEL Idaho National Engineering Laboratory.

Injection Well A well through which cooling water is returned to

the aguifer.

Isotope A form of the same atom having a different atomic

weight.

MHRS Modified Hazard Ranking System.

Migration The natural travel of a material through the air,

soil, or groundwater.

NOAA The National Oceanic and Atmospheric

Administration.

NRTS National Reactor Testing Station; previous name of

the INEL.

Nuclide A species of atom characterized by the number of

neutrons and protons in the nucleus and the energy

content of the nucleus.

PCBs Polychlorinated biphenyls.

PEW Process Equipment Waste.

Playa A dry, flat area at the lowest part of an

undrained desert basin.

PNRO Pittsburgh Naval Reactor Office.

Radioactive Spontaneously disintegrating; emitting ionizing

radiation.

R (Roentgen) A unit of radiation.

RWMC Radioactive Waste Management Complex; an INEL

facility.

TAN Test Area North; an INEL facility.

TRA Test Reactor Area; an INEL facility.

Tritium A radioactive isotope of hydrogen.

<u>UREP</u> Utilities Replacement and Expansion Project.

WCF Waste Calcining Facility at the ICPP.

WINCO Westinghouse Idaho Nuclear Company; operator of

the ICPP.